ZCA-BP **BI-PHASE / RS-485 REPEATER USER'S MANUAL**

INTRODUCTION

GANZ ZCA-BP is a Bi-phase / RS-485 repeater, which is used to extend the network distance (up to 4000 feet) and to protect the connected devices. The number of nodes can easily be extended through ZCA-BP repeater.

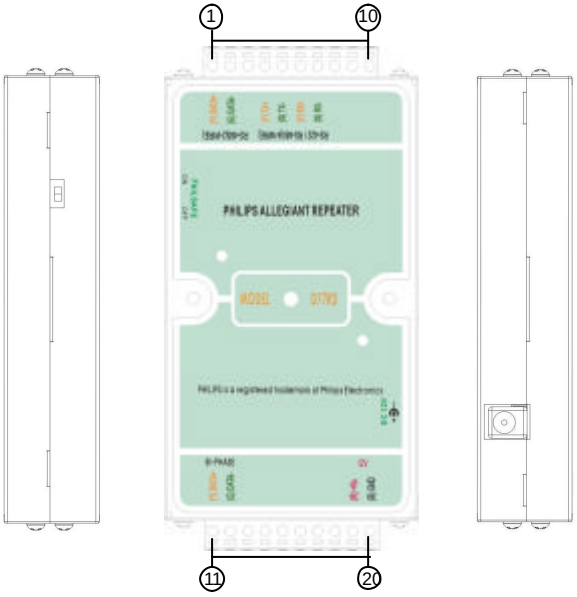
FEATURES

- Convert Bi-phase signal to RS-485/ RS-422 signal
- No external flow control signals are required for RS-485
- 1KVrms isolation protection
- Transient suppression on RS-485 data lines
- Support Philips Allegiant system

SPECIFICATIONS

- Power requirements: +10V~30Vdc
- Power consumption: 3.6 W
- Storage temperature: -25~80?
- Operation temperature: -10~70?
- Dimensions: 73mm x 127mm
- Isolation voltage: 1KVrms
- Bi-phase/ RS-485 connector: Terminal Block
- RS-485 transmission distance: up to 1.2 Km
- RS-485 (2-wires) failsafesetting: On/ Off

PIN DEFINITIONS

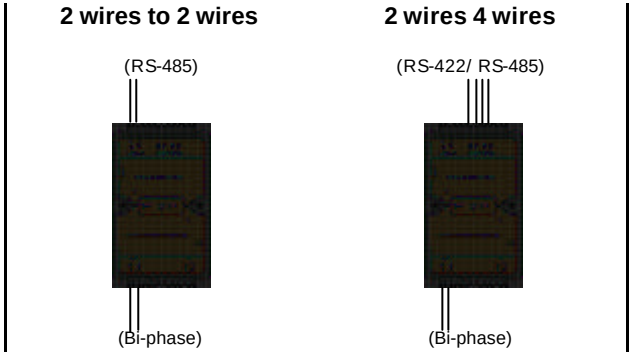


- **Terminal Block:**

1	(Y) DATA +	RS-422/ RS-485 transmission line, positive
2	(G) DATA -	RS-422/ RS-485 transmission line, negative
3	-	-
4	(Y) TX +	RS-422/ RS-485 transmission line, positive
5	(G) TX -	RS-422/ RS-485 transmission line, negative
6	(Y) RX +	RS-422/ RS-485 transmission line, positive
7	(G)RX -	RS-422/ RS-485 transmission line, negative
8	-	-
9	-	-
10	-	-
11	(Y) DATA +	Bi-phase transmission line, positive
12	(G) DATA -	Bi-phase transmission line, negative
13	-	-
14	-	-
15	-	-
16	-	-
17	-	-
18	-	-
19	(R) + Vs	Power supply, +10V~+30V
20	(B) GND	Ground

INSTALLATION

- Wire a power supply to ZCA-BP. Note that the power supply should meet the specification of ZCA-BP.
- We strongly recommend using a Category 5 (CAT5) cable for all connections.



APPLICATION NOTE

Fail Safe function guarantees that the receiver output will be a known state even the input signal is not connected. Fail Safe function of "Bi-phase" side is fixed (always ON); and the function of "RS485"side is adjustable. Please set one repeater to "ON" state per bus line.

CONNECTION DIAGRAM